September 15, 2000

Ms. Brenda Pohlmann Remediation Branch Supervisor Nevada Division of Environmental Protection 555 E. Washington, Suite 4300 Las Vegas, NV 89101

Dear Ms. Pohlmann:

Subject: Perchlorate Activity Status

Following is the current status of Kerr-McGee Chemical LLC's (Kerr-McGee) perchlorate related activities as outlined in the Perchlorate Consent Agreement (July 26, 1999) and its supporting Work Plans:

- Kerr-McGees commitment to remove perchlorate from surfacing groundwater, or the seep, is continuing, utilizing Calgon Carbons ion exchange process. To date, 40.4 tons have been removed since ion exchange operation began in November 1999. While the stream flow dropped as the summer continued, flow increased during late August and has been rising steadily since that time. The stream flow was about 210 gpm during July and risen to about 280 in mid-September. Perchlorate concentration rose through the summer as well and stabilized in August at about 100 ppm. These conditions appear typical of summertime conditions in the stream, although they represent lower flows than seen during 1999s summertime period. Although the ion exchange system is running well, we continue to have occasional operational difficulties due to the Clark County earthen dam, installed upgradient from the stream capture point. The dam continues to deteriorate. In addition, as the winter approaches and seep stream flow increases the impact of the earthen dam is unknown. Kerr-McGee is hopeful that the dam will be removed by Clark County, at the earliest possibility.
- On-site groundwater continues to be extracted and treated for chromium removal, then placed in the on-site groundwater holding basin for eventual treatment for perchlorate removal. Since initiation of impoundment in December 1998, considering the average perchlorate concentration of 1,500 ppm, 182 tons of perchlorate have been removed from the on-site shallow groundwater. The holding basin has had a very high evaporation rate due to lower than normal rainfall and above average temperature and wind conditions.
- Kerr-Gee is continued transfer of groundwater extracted from the Pittman Lateral area to its groundwater holding basin through September 12th. September 12th the pump utilized to transfer the groundwater was remove to allow the groundwater tracer test (briefly described below) to be completed. Over the 387 days this transfer has been active, approximately 1.84 tons of perchlorate have been removed from the groundwater.
- Field activities to investigate hydrologic condition in the seep vicinity are continuing. Completed are the nested well installations, the seep area reconnaissance and the near wash groundwater seep sampling. Groundwater tracer studies are underway as of this writing, following and NDEP approved Groundwater Tracer Work Plan. Tracer work is being completed at three location; the seep area, the COH RIB area, and lastly the Pittman Lateral area. The tracer study should be complete in early fourth quarter 2000.

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- NDEP, Bureau of Water Pollution Control, issued an NPDES discharge permit (NV 0023060) for perchlorate treated waters. Compliance sampling associated with this permit has begun. In addition a Las Vegas Wash Tracer Work Plan is under development to confirm the mixing zone assumptions supplied in support of the NPDES Permit application.
- Engineering (by Biothane Corporation and Applied Research Associates) is nearing completion on the perchlorate treatment system. The cost estimate and schedule were received early in July for Kerr-McGee internal review and approval. Issued for construction drawings are expected in early October. Pre-construction activities, such as site preparation, have begun at the Henderson plant. Additional activities are pending a grading permit, currently in Clark County Planning and Zoning's control. This permit is pending a process approval letter from NDEP, Nadir Sous (Las Vegas office), to continue the grading permit review process. Draft documents (drawings) have been submitted to NDEP's Las Vegas office for Mr. Sous's review. Issued for construction drawings, which are wet stamped, will be forwarded, as available. It is expected that slightly over a year will be needed to construct and start up the biological treatment facility once internal approval and NDEP approvals have been received.
- Transfer pipeline and lift station # 2 engineering drawings are nearly complete. Draft easements have been prepared for the entire run of the pipeline and for lift station #2. Access negotiations continue with the property owners. Maintenance work has begun on the section of existing pipeline that will be used to cross Warm Springs Rd. and Boulder Highway for the treated water return to the seep stream. This work is expected to be complete in the fourth guarter 2000.
- Kerr-McGee has been requested by NDEP to draft a second Consent Agreement as a follow-on to the existing Consent Agreement. The second Agreement would cover the permanent perchlorate treatment system, while the first covered the temporary seep issues.

KMC is committed to act responsibly and cooperate fully with local, state, and federal officials in determining appropriate remedial actions. Please feel free to contact me at (702) 651-2200 if you have any questions related to this information. Thank you.

Sincerely,

Susan M. Crowlev

Smuorley

Staff Environmental Specialist

By certified mail

PSCorbett CC:

EMSpore

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